

CAPACITY MANAGEMENT IN A BROADBAND
SATELLITE COMMUNICATIONS SYSTEM

ABSTRACT OF THE DISCLOSURE

An approach for managing system capacity of a satellite communications system is disclosed. A satellite communications system provides communication services to a region. A terminal (101, 103) is located within the region and is configured to transmit and receive signals over a satellite (105) having a payload that processes the signals. The terminal (101, 103) has a predetermined profile that includes service class information and rate information. A hub (107) is configured to receive system capacity resource configuration data that reflect capacity requirements of a service provider and to determine partitioning of system capacity over the region based upon the system capacity resource configuration data. The hub (107) transmits configuration information to the payload of the satellite (105) according to the determined partitions. The terminal (101, 103) is configured to transmit a bandwidth request message to the payload. The payload selectively allocates bandwidth in response to the request message based upon the configuration information.